

REMARKS

As a preliminary matter, Applicants wish to thank Examiner Reagan for the telephone interview. Following up on the interview, Applicants have amended the claims. The Examiner indicated that the amendments should overcome the prior art, pending a further search if necessary.

Claims 1 and 18 have been amended to better define the invention. Claims 6, 19 and 20 are cancelled without prejudice.

1. Claims 1-27 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,778,381 A to Sandifier in view of U.S. Patent No. 6,067,486 A to Aragonés et al. The claims as amended should be allowed for at least the following reasons.

Sandifier and Aragonés et al. fail to disclose, alone or in combination, at least the following features recited in claims 1 and 18 as amended. With regard to claim 1, neither reference, alone or in combination, disclose or suggest at least “retrieving, by a data processor, a desired configuration of the mechanical equipment based on a design objective of the mechanical equipment.” With regard to claim 18, neither reference, alone or in combination, disclose or suggest “a desired configuration database for storing a desired configuration of the mechanical equipment based on a design objective of the mechanical equipment based on a design objective of the mechanical equipment”.

The Office Action states with respect to claims 1 and 18 that the features of “retrieving by a data processor a desired configuration of the mechanical equipment” and “retrieving by the data processor an actual configuration of mechanical equipment” refer only to non-functional data contained within the database. See O.A., page 2. Claim 1 has been amended to include that “the desired configuration includes configuration data on an equipment identifier, an equipment description, an assembly identifier, an assembly description, a part identifier, a part description data, an installation location data, an installation position data, a part specification data, an assembly specification data, and an

equipment data". Claim 1 as amended also recites that the "actual configuration includes configuration data on an equipment identifier, an equipment description data, an assembly identifier, an assembly description data, a part identifier, a part description, an installed position data, an installation date, a utilization history data, a maintenance history data, a longevity information, a part specification data, an assembly specification data, and an equipment specification data". Claim 1 has also been amended to recite that the upgrade requirement plan is generated "by the data processor in accordance with the comparison of the desired configuration with the actual configuration". Claim 18 has been amended to include that "the desired configuration includes configuration data on an equipment identifier, an equipment description, an assembly identifier, an assembly description, a part identifier, a part description data, an installation location data, an installation position data, a part specification data, an assembly specification data, and an equipment data". Claim 18 as amended also recites that the "actual configuration includes configuration data on an equipment identifier, an equipment description data, an assembly identifier, an assembly description data, a part identifier, a part description, an installed position data, an installation date, a utilization history data, a maintenance history data, a longevity information, a part specification data, an assembly specification data, and an equipment specification data." Claim 18 has also been amended to recite that the upgrade requirement plan is generated "in accordance with the determination" of whether the actual configuration complies with the desired configuration.

Therefore, the "desired configuration of the mechanical equipment" and the "actual configuration of the mechanical equipment" features with regard to amended claims 1 and 18 no longer refer only to non-functional data contained within the database. For at least this reason, Applicants respectfully request that the rejection to claims 1 and 18 be withdrawn.

The Office Action states that with regard to the "retrieving, by a data processor, an actual configuration of the mechanical equipment" feature that Sandifer "essentially discloses" testing and evaluation of equipment when

disclosing maintenance and repair in compliance with regulatory requirements. If the aircraft is in the shop for repair, then a diagnostic or troubleshooting procedure would determine whether the aircraft is operating within specified parameters. See O.A. page 5. Assuming for the sake of argument that this is true, such disclosure is inapposite to the recited feature of an “actual configuration of mechanical equipment” being retrieved “by a data processor”. Sandifer neither discloses or suggests such a retrieval nor such data.

Sandifer and Aragonés et al. fail to disclose, alone or in combination, at least the following additional features recited in claims 1 and 18. Sandifer and Aragonés et al. do not disclose or suggest, with regard to claim 1, “comparing, electronically with the data processor, the desired configuration with the actual configuration to determine if the actual configuration complies with the desired configuration.” With regard to claim 18, Sandifer and Aragonés et al., alone or in combination, fail to disclose or suggest a data processor adapted “to determine if the actual configuration complies with the desired configuration.”

The Office Action is correct in that Sandifer does not disclose “comparing, electronically with the data processor, the desired configuration with the actual configuration to determine if the actual configuration complies with the desired configuration”. O.A., page 5.

The Office Action states that Aragonés et al. “essentially discloses” checking that certain configurations are to be maintained and if those configurations are not upheld the aircraft must be repaired until it is in full compliance with FAA regulations. Even if this statement were true, the Office Action seems to ignore the recited claim language that the “desired configuration” is to be compared with the “actual configuration” using “the data processor”. The referenced disclosure is irrelevant. Aragonés et al. discloses a system that retrieves engine configuration data for a plurality of limited life parts for an aircraft engine, retrieves service requirement data for at least one of the plurality of limited life parts, and automatically determines a remaining life for the part. See Aragonés et al., Abstract. The system of Aragonés et al. does not, however,

compare, as recited in claim 1, “the desired configuration with the actual configuration to determine if the actual configuration complies with the desired configuration,” nor does the system, as recited in claim 18, “determine if the actual configuration complies with the desired configuration.” Therefore, neither Sandifier nor Aragonés et al., alone or in combination, disclose at least this additional feature.

For at least this additional reason, Applicants respectfully request that the rejection to claims 1 and 18 be withdrawn.

Sandifier and Aragonés et al. fail to disclose, alone or in combination, at least the following additional features recited in claims 1 and 18. The Office Action is correct that Sandifier does not disclose, as recited in claim 1, “generating, by the data processor, an upgrade requirement plan for upgrading the actual configuration to the desired configuration if the actual configuration is noncompliant.” See O.A., page 5. Nor does Sandifier disclose, as recited in claim 18, that the data processor is adapted “to generate an upgrade requirement plan for upgrading the actual configuration to the desired configuration if the actual configuration is noncompliant.”

Aragonés et al. fails to fill the gap. The Office Action is correct that Aragonés et al. discloses “servicing at a maintenance or repair shop for a number of reasons such as to repair damage to the aircraft engine, restore operating performance of the aircraft engine, inspect or repair safety flaws in the aircraft engine, or upgrade the aircraft engine for increased operating life.” See O.A., page 6. The Office Action also states that Aragonés et al. shows service requirements data indicating that a planned service and maintenance are scheduled. However, these disclosures are inapposite to the recited features in claims 1 and 18 of an “upgrade requirement plan” being generated “for upgrading the actual configuration to the desired configuration if the actual configuration is noncompliant.”

Accordingly, for at least this additional reason, Applicants respectfully request that the rejection of claims 1 and 18 be withdrawn.

2. Claims 2-5 and 7-17 depend, directly or indirectly, from claim 1, and claims 21-27 depend, directly or indirectly, from claim 18. Therefore, for at least the reasons discussed above with regard to amended independent claims 1 and 18, Applicants respectfully request that the rejection to claims 2-5, 7- 17 and 21-27 also be withdrawn.

The Office Action takes Official Notice with regard to claims 7-9 that it is old and well-known in the mechanical arts to test parts, assemblies, and equipment after routine maintenance or repair to ensure that each item of significance is functioning properly and within specified parameters. Applicants traverse the Official Notice. The Office Action fails to show a teaching or suggestion in any reference to make the features of the dependent claims obvious in a system including the features of the independent claims. If these rejections are to be maintained, Applicants respectfully request a new Office Action so that we can respond appropriately to the rejection.

Moreover, the rejection is inapposite. The claims recite a “desired configuration” based on “monitoring operational performance of a part,” with respect to claim 7, “monitoring operational performance of an assembly,” with respect to claim 8, and “monitoring operational performance of the mechanical equipment,” with respect to claim 9. The system of claim 1 “generat[es], by the data processor, an upgrade requirement plan for upgrading the actual configuration to the desired configuration if the actual configuration is noncompliant.” Applicants respectfully note that monitoring a newly installed part fails to show the claimed feature of “generating, by the data processor, an upgrade requirement plan for upgrading the actual configuration to the desired configuration” “wherein the desired configuration is based upon” “monitoring operational performance of an assembly”, with respect to claim 7, “monitoring operational performance of an assembly,” with respect to claim 8, or “monitoring operational performance of the mechanical equipment,” with respect to claim 9.

The Office Action takes Official Notice with regard to claims 10 and 11 that it old and well-known in the mechanical arts to replace parts, assemblies, and

equipment that will have a longer or extended lifetime to ensure that each item of significance is functioning properly and within specified parameters. Applicants traverse the Official Notice. The Office Action fails to show a teaching or suggestion in any reference to make the features of the dependent claims obvious in a system including the features of the independent claims. If these rejections are to be maintained, Applicants respectfully request a new Office Action so that we can respond appropriately to the rejection.

Moreover, the rejection is inapposite. Claim 10 recites a “desired configuration is based on a substituted part with a greater longevity substituted for a part with a lesser longevity.” Similarly, claim 11 calls for a “desired configuration is based on a substituted assembly with a greater longevity substituted for an assembly with a lesser longevity.” Applicants respectfully point out that these features have not been addressed and the claims do not recite a lifetime expectation to be included in the configuration.

With regard to claim 15, the Office Action states that it is “old and well-known in the mechanical art to disassemble and inspect components to ensure proper operation. Applicants traverse the Official Notice. The Office Action fails to show a teaching or suggestion in any reference to make the feature of this dependent claim obvious in a system including the features of the independent claims. If this rejection is to be maintained, Applicants respectfully request a new Office Action so that we can respond appropriately to the rejection.

With regard to claim 17, the Office Action takes Official Notice that it is old and well-known to consider disposal and salvage responsibilities. The Office Action fails to show a teaching or suggestion in any reference to make the feature of this dependent claim obvious in a system including the features of the independent claims. If this rejection is to be maintained, Applicants respectfully request a new Office Action so that we can respond appropriately to the rejection.

With regard to claims 21-26 the Office Action states that it is old and well-known in the computer arts that computers can function as workstations for

technicians and repairmen. Applicants traverse the Official Notice. The Office Action fails to show a teaching or suggestion in any reference to make the features of the dependent claims obvious in a system including the features of the independent claims. If these rejections are to be maintained, Applicants respectfully request a new Office Action so that we can respond appropriately to the rejection.

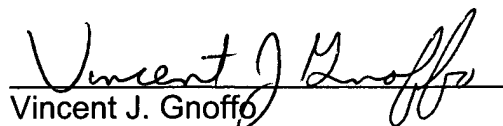
For at least these additional reasons, it is respectfully requested that the rejections to claims 7-9, 10, 11, 15, 17 and 21-26 be withdrawn.

3. The Office Action states that with regard to Official Notice in the previous Office Action, Applicant failed to provide evidence that the Examiner's use of Official Notice is flawed or in error. See O.A., pages 3 and 4. Applicants respectfully disagree. To adequately traverse a finding of Official Notice, "an applicant must specifically point out the supposed errors in the examiner's action, which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art." See MPEP 2144.04 (c). Applicants clearly stated in the last response that that "Where Official Notice is taken to reject a dependent claim, the Office Action fails to show a teaching or suggestion in any reference to make the features of the dependent claims obvious in a system including the features of the independent claims." See e.g. Amendment Dated May 12, 2004, page 10. In other words, the Office Action failed to show that it would have been common knowledge or well-known in the art to use the recited feature with the claimed combination. "If applicant adequately traverses the examiner's assertion of official notice, the examiner must provide documentary evidence in the next Office action if the rejection is to be maintained". MPEP 2144.04(C). Applicants respectfully request that the Office Action withdraw the rejections where Official Notice was used or provide documentary evidence of the Official Noticed feature as used in the claimed combination.

CONCLUSION

For at least all of the above reasons, Applicants submit that the pending claims are in condition for allowance and notice to this effect is respectfully requested. The Examiner is invited to call the undersigned if it would expedite the prosecution of this application.

Respectfully submitted,

A handwritten signature in cursive script, reading "Vincent J. Gnoffo", written over a horizontal line.

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